6/28/89

United States Environmental Protection Agency
Washington, D. C. 20460

EPA NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5	3 M I 0 0 0 2 3 8 1 11	12 8 9 0 6 2 8 17	18 A	19 R	20 2

Remarks

21 66

Reserved	Facility Evaluation Rating	BI	QA	Reserved
67 69	70 5	71 N	72 Q	73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected
PENNWALT CORPORATION
4655 BIDDLE AVENUE
WYANDOTTE, MICHIGAN 48912

Entry Time ☒ AM ☐ PM
Exit Time/Date 6-28-89

Permit Effective Date 9-15-88
Permit Expiration Date 10-1-92

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
THOMAS RAY	MANAGER ENVIRONMENTAL AFFAIRS	(313) 246-2030
LIONEL MONATTE	SUPERVISOR, LABORATORIES	285-9200
THOMAS OUERGARD	SUPERVISOR OF CHEMISTS	246-2070
ERIC PALLER	WASTEWATER ANALYST	285-9200

Name, Address of Responsible Official
FRANK DIMAGGIO
(SAME AS ABOVE)

Title
PLANT MANAGER

Phone No.
(313) 285-9200

Contacted ☐ Yes ☒ No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	—	Pretreatment	—	Operations & Maintenance
S	Records/Reports	S	Laboratory	—	Compliance Schedules	—	Sludge Disposal
S	Facility Site Review	S	Effluent/Receiving Waters	S	Self-Monitoring Program		Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

NO LABORATORY DEFICIENCIES WERE UNCOVERED WHICH COULD EXPLAIN THE UNACCEPTABLE RESULTS FOR BOD_5, TOTAL SUSPENDED SOLIDS AND TOTAL ZINC IN THE DMR-QA 008 CHECK SAMPLES. DATA REPORTED BY THIS PERMITTEE UNDER THE NPDES PROGRAM SHOULD BE CONSIDERED ACCURATE AND VALID.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
ARTHUR S. GEDEON Arthur S. Gedeon	USEPA, REGION V EASTERN DISTRICT OFFICE (216) 835-5200; FTS 942-7260	JUNE 28, 1989
Signature of Reviewer	Agency/Office	Date

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Compliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

NPDES No. MI0002381

Facility Name PENNWALT CORPORATION

City and State WYANDOTTE, MICHIGAN

Date of Inspection JUNE 28, 1989

RECORDS, REPORTS, AND SCHEDULES CHECKLIST

A. PERMIT VERIFICATION

YES	NO	N/A	INSPECTION OBSERVATION CONTAINED IN PERMIT
X			1. Correct name and mailing address of permittee.
X			2. Facility is as described in permit.
X			3. Notification has been given to EPA. State of new, different, increased discharges.
		X	4. Accurate records of influent volume are maintained, when appropriate.
X			5. Number and location of discharge points are as described in the permit.
X			6. Name and location of receiving waters are correct.
X			7. All discharges are permitted.

B. RECORDKEEPING AND REPORTING EVALUATION

			RECORDS AND REPORTS ARE MAINTAINED AS REQUIRED BY PERMIT
X			1. All required information is available, complete, and current; and
X			2. Information is maintained for required period.
			3. Analytical results are consistent with the data reported on the IMR's.
			4. Sampling and Analysis Data are adequate and include:
X			a. Dates, times, location of sampling
X			b. Name of individual performing sampling
X			c. Analytical methods and techniques
X			d. Results of analysis
X			e. Dates of analysis
X			f. Name of person performing analysis
		X	g. Instantaneous flow at grab sample stations
			5. Monitoring records are adequate and include
X			a. Flow, pH, D.O., etc, as required by permit
X			b. Monitoring charts
X			6. Laboratory equipment calibration and maintenance records are adequate. BALANCES 2X/YR
		X	7. Plant Records are adequate* and include
			a. O&M Manual
			b. "As-built" engineering drawings
			c. Schedules and dates of equipment maintenance and repairs
			d. Equipment supplies manual
		N	e. Equipment data cards

* Required only for facilities built with Federal construction grant funds.

RECORDS, REPORTS, AND SCHEDULES CHECKLIST

B. Recordkeeping and Reporting Evaluation (continued)

YES	NO	N/A	
			8. Pretreatment records are adequate and included:
			a. Industrial Waste Ordinanace (or equivelant documents)
			b. Inventory of industrial waste contributors, including:
			1. Compliance records
			2. User charge information
			9. SPCC properly completed, when required.
			10. Best Management Practices Program available, when required.

C. Compliance Schedule Status Review

		X	THE PERMITEE IS MEETING THE COMPLIANCE SCHEDULE
			1. The permitee has obtained necessary approvals to begin construction.
			2. Financing arrangements are completed.
			3. Contracts for engineering services has been executed.
			4. Design plans and specifications have been completed.
			5. Construction has begun.
			6. Construction is on schedule.
			7. Equipment acquisition is on schedule.
			8. Construction has been completed.
			9. Start-up has begun.
			10. The permittee has requested an extension of time.
			11. The permittee has met compliance schedule.

RECORDS, REPORTS, AND SCHEDULES CHECKLIST

D. POTW Pretreatment Requires Review

YES	NO	N/A	THE FACILITY IS SUBJECT TO PRETREATMENT REQUIREMENTS
			1. Status of POTW Pretreatment Program
			a. The POTW Pretreatment Program has been approved by EPA. (If not, is approval in progress? _____)
			b. The POTW is in compliance with the Pretreatment Program Compliance Schedule. (If not, what is due, and intent of the POTW to remedy)
			2. Status of Compliance with Categorical Pretreatment Standards.
			a. How many industrial users of the POTW are subject to Federal or State Pretreatment Standards? _____
			b. Are these industries aware of their responsibility to comply with applicable standards?
			c. Have baseline monitoring reports (403.12) been submitted for these industries?
			Have categorical industries in noncompliance (on EMR reports) submitted compliance schedules?
			How many categorical industries on compliance schedules are meeting the schedule deadlines? _____
			d. If compliance deadlines has passed, have all industries submitted 90 day compliance reports?
			e. Are all categorical industries submitting the required semiannual report?
			f. Are all new industrial discharges in compliance with new source pretreatment standards?
			g. Has the POTW submitted its annual pretreatment report?
			h. Has the POTW taken enforcement action against noncomplying industrial users?
			i. Is the POTW conducting inspections of industrial contributors?
			3. Are the industrial users subject to Prohibited Limits (403.5) and local limits more stringent tha EPA in compliance? (If not , explain why, including need for revision limits.)

FACILITY SITE REVIEW CHECKLIST

YES	NO	N/A	
X			1. Standby power or other equivalant provision is provided.
X			2. Adequate alarm system for power or equipment failures is available.
		X	3. POTW handles and disposes of sludge according to applicable Federal, State, and local regulators.
X			4. All treatment units, other than back-up units, are in service.
X			5. Procedures for facility operation and maintenance exist.
X			6. Organization plan (chart) for operation and maintenance is provided.
X			7. Operating schedules are established.
X			8. Emergency plan for treatment control is established.
			9. Operating management control documents are current and include.
X			a. Operating report
X			b. Work schedule 24HRS/DAY
X			c. Activity report (time cards)
		X	10. Maintenance record system exists and includes:
			a. As-built drawings
			b. Shop drawings
			c. Construction specifications
			d. Maintenance history
			e. Maintenance costs
X			11. Adequate number of qualified operators are on hand.
X			12. Established procedures are available for training new operators.
X			13. Adequate spare parts and supplies inventory and major equipment specifications are maintained.
X			14. Instruction files are kept for operation and maintenance of each item of major equipment.
X			15. Operation and maintenance manual is available.
		X	16. Regulatory agency was notified of bypassing. NOT POSSIBLE TO BY-PASS (Dates _____)

FACILITY SITE REVIEW CHECKLIST

YES	NO	N/A	
	X		17. Hydraulic and/or organic overloads are experienced. Reason for overloads _____
X			18. Up-to-date equipment repair records are maintained.
		X	19. Dated tags show out of service equipment. REPAIRED
X			20. Routine and preventive maintenance are scheduled/performed on time.

PERMITTEE SAMPLING INSPECTION CHECKLIST

A. Permittee Sampling Evaluation

YES	NO	N/A	
X			1. Samplings are taken at sites specified in permit.
X			2. Locations are adequate for representative samples.
		X	3. Flow proportioned samples are obtained where required by permit. NOT STATED IN PERMIT
X			4. Sampling and analysis completed on parameters specified by permit.
X			5. Sampling and analysis done in frequency specified by permit.
X			6. Permittee is using method of sample collection required by permit. Required Method: _____ If not, method being used is: ( ) Grab ( ) Manual composite ( ) Automatic composite
X			7. Sample collection procedures are adequate:
X			a. Samples refrigerated during compositing
X			b. Proper preservation technique used
X			c. Container and sample holding times before analyses conform with 40 CFR 136.3
		X	8. Monitoring and analyses are performed more often than required by permit. If so, results reported in permittee's self-monitoring report.

B. Sampling Inspection Procedures and Observations

		X	1. Grab samples obtained
			2. Composite sample obtained Composite frequency _____ Preservation _____
			3. Sample refrigerated during compositing.
			4. Flow proportioned sample obtained.
			5. Sample obtained from facility sampling device.
			6. Sample representative of volume and nature of discharge.
			7. Sample split with permitee.
			8. Chain of custody procedures employed.

FLOW MEASUREMENT

A. Flow Measurement Inspection Checklist-General

YES	NO	N/A	
X			1. Primary flow measurement device is properly installed and maintained.
X			2. Flow records are properly kept.
X			3. Sharp drops or increases in flow value are accounted for.
	X		4. Actual flow discharge is neasured.
X			5. Influent flow is measured before all return lines. INTAKE RIVER H_2O PUMPS
		X	6. Effluent flow is measured after all lines.
X			7. Secondary instruments (totalizers, recorders, etc.) are properly operated and maintained
X			8. Spare parts are stocked.

B. Flow Measurement Inspection Checklist-Flumes

		X	1. Flow intering flume appears reasonably well distributed across the channel and free of turbulence, boils, or other distortions.
			2. Cross-section velocities at entrance are relatively uniform.
			3. Flume is clean and is free of debris or deposits.
			4. All dimensions of flume are accurate.
			5. Side walls of flume are vertical and smooth.
			6. Sides of flume throat are vertical and parallel.
			7. Flume head is being measured at proper location.
			8. Measurement of flume head is zeroed to flume crest.
			9. Flume is of proper size to measure range of existing flow.
			10. Flume is operating under free-flow conditions over existing range of flows.

INTAKE RIVER WATER METERS BEING USED FOR EFFLUENT FLOW DISCHARGE (BEING REVIEWED BY DNR)

FLOW MEASUREMENT

C. Flow Measurment Inspection Checklist - Weirs

YES	NO	N/A	
		X	1. What type of weir is being used?
			2. The weir is exactly level.
			3. The weir plate is plumb and its top edges are sharp and clean.
			4. There is free access for air below the nappe of the weir.
			5. Upstream channel of weir is straight for at least four times the depth of water level, and free from disturbing influences.
			6. The stilling basin of the weir is of sufficient size and clear of debris.
			7. Head measurements are properly made by facility personnel.
			8. Proper flow tables are used by facility personnel.

D. Flow Measurement Inspection Checklist - Other Flow Devices

			1. Type of flowmeter used: DIFFERENTIAL FLOW METER
			2. What are the most common problems that the operator has had with the flowmeter? _____ _____
			3. Measure Wastewater flow: _____ mgd; Recorded flow: _____ mgd; Error _____ %
			4. Design flow: _____ mgd.
X			5. Flow totalizer is properly calibrated.
			6. Frequency of routine inspection by proper operator: ONCE /day.
			7. Frequency of maintenance inspections by plant personnel: _____/year.
			8. Frequency of flowmeter calibration: _____ /month.
X			9. Flow measurement equipment adequate to handle expected ranges of flow rates.
		X	10. Venturi meter is properly installed and calibrated.
		X	11. Electromagnet flowmeter is properly calibrated.

LABORATORY QUALITY ASSURANCE CHECKLIST

A. General

YES	NO	N/A	
X			1. Written laboratory quality assurance manual is available.

B. Laboratory Procedures

X			1. EPA approved analytical testing procedures are used.
		X	2. If alternative analytical procedures are used, proper approval has been obtained.
X			3. Calibration and maintenance of instruments and equipment is satisfactory.
X			4. Quality control procedures are used.
X			5. Quality control procedures are adequate.
			6 Duplicate sample are analyzed 30+ % of time. SS, NH3,
		X	7 Spiked samples are used 0 % of time.
			8. Commercial laboratory is used: Name: YORK LABS Address: CHICAGO ILL Contact: _____ Phone: _____

C. Laboratory Facilities and Equipment

X			1. Proper grade distilled water is available for specific analysis.
X			2. Dry, uncontaminated compressed air is available.
X			3. Fume hood has enough ventilation capacity.
X			4. The laboratory has sufficient lighting.
X			5. Adequate electrical sources are available.
X			6. Instruments/equipment are in good condition.
X			7. Written requirements for daily operation of instruments are available.

LABORATORY QUALITY ASSURANCE CHECKLIST (continued)

C. Laboratory Facilities and Equipment (continued)

YES	NO	N/A	
X			8. Standards are available to perform daily check procedures.
X			9. Written trouble-shooting procedures for instruments are available.
X			10. Schedule for required maintenance exists.
X			11. Proper volumetric glassware is used.
X			12. Glassware is properly cleaned.
X			13. Standard reagents and solvents are properly stored.
X			14. Working standards are frequently checked.
X			15. Standards are discarded after shelf life has expired.
X			16. Background reagents and solvents run with every series of samples.
X			17. Written procedures exist for cleanup, hazardous response methods, and applications of correction methods for reagents and solvents.
X			18. Gas cylinders are replaced at 100-200 psi. A.A. METHODS

D. Laboratory's Precision, Accuracy, and Control Procedures

X			1. A minimum of seven replicates is analyzed for each type of control check and this information is on record.
X			2. Plotted precision and accuracy control charts are used to determine whether valid, questionable, or invalid data are being generated from day to day.
X			3. Control samples are introduced into the train of actual samples to ensure that valid data is being generated.
X			4. The precision and accuracy of the analyses are good.

LABORATORY QUALITY ASSURANCE CHECKLIST (continued)

E. Data Handling and Reporting

YES	NO	N/A	
X			1. Round-off rules are uniformly applied.
X			2. Significant figures are established for each analysis.
X			3. Provision for cross-checking calculations is used.
X			4. Correct formulas are used to reduce to simplest factors for quick, correct calculations.
X			5. Control chart approach and statistical calculations for quality assurance and report are available and followed.
X			6. Report forms have been developed to provide complete data documentation and permanent records and to facilitate data processing.
X			7. Data are reported in proper form and units.
X			8. Laboratory records are kept readily available to regulatory agency for required period of time
X			9 Laboratory notebook or preprinted data forms ~~are permanently bound to~~ provide good documentation.
X			10. Efficient filing system exists enabling prompt channeling of report copies.

F. Laboratory Personnel

X			1. The analyst has appropriate training
X			2. The analyst follows the specified procedures
X			3. The analyst is skilled in performing analyses

II. SAMPLING AND PRESERVATION

Laboratory PENNWALT Unit _____

Provide a listing of sample containers and preservatives (icing or refrigeration are a preservative) used for chemical analyses. For each container and preservative combination provide a listing of parameters routinely analyzed and their normal holding times. Use comments to differentiate programs, if necessary, or to note any special container precleaning used. If this information is already documented, please provide it instead of completing this section.

Container* (also state volume)	Preservation	Parameters	Holding Time (normal)	Comments
D.O.	FROM Cl_2 BOTTLE		< 30 MIN	GRABS *
PH	FROM Cl_2 SAMPLE		< 30 MIN	*
Cl_2	NO AIR SPACE IN BROWN QT BOTTLE		< 30 MIN	LOW Cl_2 ANYWAY *
* SUSP. SOLIDS	(4) NP	1 GAL GLASS BOTTLE	< 1 HR	
* LOW BOD5			< 1/2 HR	
CHLORIDES	(4)		< 1 HR	
* LOW ZINC	ALIQUOTE OF TOM PLASTIC BOTTLE			
PHENOL	1 ml H_2SO_4 NOT ICED	DONE BY GC		TO CONTRACTOR YORK LABS IN CHICAGO *
NH_3	~~1 ml H_2SO_4~~ NP ~~NOT ICED~~		RUN WITHIN 1 HR	MONITOR ONLY
TEMP.				
	MAY BE DONE	IN-HOUSE		

* High Density Polyethlene (HDP), Low Density Polyethylene (LDP), Glass (G), Reusable (R), Disposable (D).

III. TEST PROCEDURES USED FOR POINT SOURCE MONITORING including COMPLIANCE MONITORING FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Laboratory PENNWALT

SPECIFIC PARAMETER	METHOD DESCRIPTION	REFERENCE STD. METHODS	USEPA METHODS	ASTM METHODS	OTHER	
pH	CORNING pH/ION 135 2 BUFFER 4 & 10 CALB METER 3x/WK RECORDS STD-ZATION	16th				OK
Cl_2	SPECIFIC ION METER Cl_2 IN DARK BOX CAB EACH TIME					OK
D.O. BOD5 * 1/2	4 DIL / 3 SEED / 1 BLK MAKE OWN SEED HACK PILLOWS DAILY	BOD STD RUN WEEKLY				
* SUSP SOLIDS * 1/2	TEMP @ 107 6/28/89 NORMALLY 100-105 °C USE 103-105		SS STD RUN WEEKLY			OK
CHLORIDE	AgNO3 TITRATION K CrO4 IND 100 ml / NEW STD WHEN NEW STD Cl SAMP		ONCE/mo			OK
X * LOW ZINC						
PHENOL	CONTRACT GC					
NH_3	DIST w/ BÜCHI 320 (STEAM DISTILLS NH_3 INTO IND. BORIC ACID)					OK
	STD DISTILLED OVER H_2SO_4 TITRATION					

TEMP.